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ABSTRACT

After first glancing at previous research suggesting that schools (and principals) had little effect on students, this research review focuses on six research studies that suggest the opposite: schools (and their principals) can make an important difference in student achievement. The review highlights Michael Rutter's three-year study of British ten-year olds, which concluded that the "ethos" or norms of a school exert more influence on students than any other factor. Also discussed is Wilbur Brookover's study of Michigan elementary schools that reached a similar conclusion: a successful school has a climate that furthers success. These findings are seen to support those of Gilbert Austin, who found in addition that unusually successful schools all had a principal or other leader who was exceptional. Ronald Edmonds, who reviewed studies of effective schools, is also cited as finding that strong administrative leadership is the most important factor in school effectiveness. Finally, two other studies are briefly mentioned that emphasize the importance of leadership to school effectiveness. The review concludes that schools do positively affect the achievement of students by creating norms that support achievement and that the person who has the most influence on these is the principal. (Author/JM)

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RESEARCH ACTION BRIEF

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Each *Research Action Brief* reports the findings of significant empirical research studies on a topic in educational management. From these findings implications are drawn for the operation of today's schools, thus serving as a guide for enlightened administrative action.

This *Research Action Brief* was prepared by the ERIC Clearinghouse on Educational Management for distribution by the National Association of Secondary School Principals.

Schools—and Their Principals—Do Make a Difference

In the late 1960s and early 1970s educators and the public were dismayed by research reports that apparently showed schools had little if any effect on the achievement of students. Student achievement and other educational outcomes, it was argued, were predetermined by the family's socioeconomic status (SES) or else were influenced greatly by pure luck.

These findings were rightly unsettling to educators, whose careers rest on the assumption that their efforts can make a difference in the lives of students. Furthermore, educators know from personal experience that their efforts and the efforts of their colleagues do, in fact, affect students. It seemed impossible that people could believe anything else! To make matters worse, when educators attempted to point out deficiencies in these research findings, they were attacked for expressing self-interest or for a desire to save their jobs.

As so often happens, the tables have now turned. Research is now showing that educators were right, that what takes place in the schools can make an important difference both in students' academic achievement and in their personal development. It is these newer reports that provide the focus for this Research Action Brief. But first we will look at some criticisms of the early findings.

Unfounded Pessimism

The research under criticism usually treated education as a "black box," the contents of which were inscrutable. Rather than study what happened inside the box, researchers looked at what went in ("input" variables such as student SES, student race, quality of buildings, expenditures per student, and teacher qualifications) and what came out ("output" variables or outcomes such as student achievement, lifetime earnings, and delinquency), and then drew correlations between the inputs and outputs.

Numerous critics argue that conclusions based on this kind of research are flawed. Michael Rutter and his colleagues, for example, criticized James Coleman's 1966 book *Equality of Educational Opportunity* for using student verbal ability as a measure of educational output. They argue that verbal ability is too heavily influenced by the home; a more proper way to measure school success in raising achievement would be to study a subject that is taught particularly in the schools, such as mathematics.

Rutter's group also argues that Christopher Jencks's 1972 book on inequality erred because it used inadequate input variables. These measures—easily quantifiable ones such as expenditures per student, class size, and teacher qualifications—had already been shown to have little effect on student achievement. Other aspects of schooling should have been examined instead.

Further, even if it were possible to show that family influence is greater than school influence, this would not establish that school influence is trivial or inconsequential. Again, to show that certain inequalities between groups do

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not diminish with increased expenditures does not establish that students gain nothing of value from school nor that nothing can be done to enhance student achievement.

In essence, critics argue that the early studies chose to study inappropriate aspects of the school. They assert that if one is to understand the effects of schooling on students it is necessary to go inside the "black box" to see what happens when the inputs mix with each other and with students to produce the outputs.

Schools Make a Difference

In 1979 two books appeared that demonstrated the importance of investigating what goes on inside the school. One, *Fifteen Thousand Hours*, was based on a longitudinal study of secondary students in London; the other, *School Social Systems and Student Achievement: Schools Can Make a Difference*, was based on a study of Michigan elementary schools. Each in its own way set about correcting what its authors saw as errors and omissions in the earlier works.

For *Fifteen Thousand Hours* (the amount of time an English student spends in school until he or she is old enough to leave), Michael Rutter and his colleagues chose to conduct a longitudinal study. They felt that one flaw in the earlier works was that not enough was known about students before they entered the particular period of schooling that was to be studied. Some early research looked only at the levels of achievement students had attained when they finished a period of schooling. For a valid judgment of the effect of schooling, one must also know as much as possible about the students before and after their exposure to the school period studied.

The study began with a group of inner London ten-year-olds about to leave primary school. The students' verbal reasoning, behavior, parents' occupation, nonverbal intelligence, and reading level were studied as input (or "intake") variables. A group of these students was followed as it went through three years of schooling. The output variables studied were behavior, attendance, examination success, delinquency, and employment after leaving school.

The group's classmates were also studied to make sure that the group was not in some way unusual. The settings of the schools and their interaction with the community were taken into account as "ecological" variables. But, most importantly, the schools themselves and the processes that take place within them were examined. Researchers evaluated the schools on the basis of academic emphasis, teacher actions in lessons, rewards and punishments given students, the general conditions under which students worked, responsibilities and participation allowed students, stability of teaching and student peer groups, staff organization, and the skills of teachers. These "process" variables were examined together with the ecological variables, intake variables, outcome measures, and other variables in an attempt to identify as many influences on the students as possible.

The study came to ten main conclusions, including the following: the schools did differ significantly in student behavior, attendance, success in exams, and delinquency; although the mix of abilities of students attending the schools influenced these outcomes, the mix did not wholly account for the differences between schools; the differences between schools were not explainable by differences in physical facilities; the differences were systematically related to the schools' characteristics as social organizations; schools were influenced by ecological factors; and the way in which the process variables related indicates that there is probably a cumulative effect—that they work together to create what the authors term an *"ethos*, or set of values, attitudes and behaviors which will become characteristics of the school as a whole."

It is the ethos, or set of norms, of a school that seems to exert the most influence on students. Students who attended schools with different norms had different scores on the output measures. By assembling data on all the variables, it was possible to paint a picture of a school that exerts a positive influence. On the whole, "children benefit from attending schools which set good standards, where teachers provide good models of behaviour, where they are praised and given responsibility, where the general conditions are good and where the lessons are well conducted."

These aspects of good schools are furthered by teacher expectations of student achievement and behavior and by the feedback the school provides on what is acceptable performance. It is the combination of these qualities that makes up the ethos, or norms and expectations, of a successful school.

Importance of School Climate

While Rutter and his colleagues write about a school's ethos, Wilbur Brookover and his coworkers on the Michigan study argue that "each school has a set of student status-role definitions, norms, evaluations, and expectations characterizing the behavior expected of students." Although the words are a bit different, in both cases the researchers are concerned with schoolwide standards and expectations that are set for students. Each team of researchers views the school as a social system: The school socializes its members to accept its norms.

Brookover and his colleagues examined a set of inputs (including the traditional ones of student SES and racial composition) and outcomes (academic achievement in reading and arithmetic, student self-concept about academic ability, and self-reliance). Like Rutter's team, they also looked at school process variables, which they divided into two groups—social structure and social climate. The social structure measures were teacher satisfaction, parent involvement in the school, differentiation in student programs, the principal's report of his or her time given to instruction, and the use of open and closed classrooms. School climate was made up of fourteen measures of student, teacher, and principal perceptions of and attitudes toward the expectations and norms of the school.

Sorting through all of these variables to establish their effect on students was a difficult task because it is hard to identify the effects of individual variables. The traditional measures of student SES and racial factors, for instance, are tightly interrelated with the researchers' new measures of school climate factors. For instance, the student SES and racial composition of the student body can affect the expectations of teachers and thus influence the school's climate

References

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1. Austin, Gilbert R. "Exemplary Schools and the Search for Effectiveness." *Educational Leadership*, 37, 1 (October 1979), pp. 10-14. Order from UMI (see below). Specify EJ 208 050. $10.00.

2. Brookover, Wilbur; Beady, Charles; Flood, Patricia; Schweitzer, John; and Wisenbaker, Joe. *School Social Systems and Student Achievement: Schools Can Make A Difference*. New York: Praeger Publishers, 1979. Order from Holt, Rinehart and Winston, ATTN: Order Dep't., 383 Madison Ave., New York, NY 10017. 327.95.

3. Deal, Terrence E., and Celotti, Lynn D. "How Much Influence Do (and Can) Educational Administrators Have on Classrooms?" *Phi Delta Kappan*, 61, 7 (March 1980), pp. 471-73. Order from UMI (see below). Specify EJ 216 078. $8.00.

4. Edmonds, Ronald. "Effective Schools for the Urban Poor." *Educational Leadership*, 37, 1 (October 1979), pp. 15-18, 20-24. Order from UMI (see below). Specify EJ 208 051. $10.00.

5. Rutter, Michael; Maughan, Barbara; Mortimore, Peter; and Ouston, Janet; with Smith, Alan. *Fifteen Thousand Hours: Secondary Schools and Their Effects on Children*. Cambridge: Harvard University Press, 1979. Order from Harvard University Press, 79 Garden St., Cambridge, MA 02138.

6. Wellisch, Jean B.; MacQueen, Anne H.; Carriere, Ronald A.; and Duck, Gary A. "School Management and Organization in Successful Schools (ESAA In-Depth Study Schools)." *Sociology of Education*, 51, 3 (July 1978), pp. 211-26. Order from UMI (see below). Specify EJ 185 997. $10.00.

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and its reward and feedback systems. This happens in many cases because low-SES and minority students have less asked of them—they are not expected to succeed. That some low-SES and high-minority-attendance schools do have good social systems and do produce higher achievement than other similar schools argues for the importance of the school's climate.

In the end, although the traditional input measures did have an impact on student achievement, school climate was more important in influencing achievement. Not only are the climate factors more effective in raising achievement, they are also the most important influences on students' self-concept of their academic ability. Especially vital to students' self-concept is their perception of others' present and future evaluations and expectations of them. Furthermore, particularly in low-SES white and in black schools, the school's climate greatly influences student self-reliance.

A successful school, then, has a climate that furthers success. That climate arises from a set of expectations and norms concerning student behavior. A successful school is one in which principals and teachers inculcate in students a sense that they can succeed. Principals and teachers set high standards and convince students that these standards can and will be met. These expectations are apparent in the way the school day is filled with activities whose purpose is to instruct and in the way that achievement is consistently rewarded. Brookover and his colleagues argue that a school is a social system that produces what it was designed to produce. The successful school is designed to expect and get success.

A Critical Mass of Qualities

The studies led by Rutter and by Brookover do differ from the early research both in their approach and in their conclusions. They looked at students before and after school experiences and saw a difference in their achievement that depended on which schools they attended. Then the researchers looked inside the schools to see what happens in them that could account for the differences. Not surprisingly, they found a complex social organization whose various qualities work together to shape students. It is these characteristics of the schools, expressed in terms of expectations, norms, climate, and ethos, that the early researchers missed.

To some, these concepts may sound a bit vague or abstract. It would, perhaps, be preferable to find that school success is attributable to specific programs or innovations. Schools, however, do not succeed because a specific program or approach, be it organizational or instructional, was adopted. A school succeeds because a host of factors work together to mold it into a well-functioning unit.

This understanding matches an observation Gilbert Austin makes in his analysis of the research literature on schools that raised student achievement beyond expected levels: Schools seem to need to accumulate a "critical mass" of positive qualities to be successful. None of the successful schools studied had all the positive qualities in common (many of the qualities focused on principal and teacher expectations and attitudes), and equally successful schools could have many different, as well as many similar, qualities.

Just as there is no single program that ensures success, so there doesn't seem to be any specific positive quality or group of qualities that guarantees results. Each school is unique and must be considered on the basis of its own characteristics.

The Principal Shapes the School

Amid this diversity, Austin's analysis revealed one quality that did seem constant. Schools that were unusually successful all had a principal, or other leader, who was exceptional. These leaders exerted influence through the respect teachers and students had for the leaders' knowledge of the instructional aspects of the school.

The idea that it is the principal who shapes successful schools is not radically new; it is one that has been with us for generations and shows up in other research. Ronald

Edmonds, for example, reviewed studies on effective schools and found leadership to be a key factor. In his summary of the "indispensable characteristics" of effective schools, he listed as first "strong administrative leadership without which the disparate elements of good schooling can be neither brought together nor kept together." Edmonds sees leadership as the most important factor in school effectiveness.

Jean Wellisch and colleagues looked at twenty-two elementary schools that had raised the reading and mathematics achievement of their students, who were generally disadvantaged and low achieving. These successful schools had active administrators who were concerned about instruction, communicated their views, took responsibility for decisions on instruction, coordinated instructional programs, and emphasized academic standards.

Although these administrators were strong leaders, they were not dictators. A common method of exerting leadership was through regular sessions with teachers in which the principal discussed and reviewed teacher performance. By conferring with teachers and by demonstrating interest and support, principals can be involved in decisions concerning instructional matters without reducing a teacher's sense of authority.

Terrence Deal and Lynn Celotti emphasize the importance of the principal assuming the role of a senior colleague or of a "symbolic" leader to influence teachers. A principal who offers advice and support as a colleague may be more effective than one who uses the official weight of the office to get results. And, a principal who can capitalize on the various myths, rituals, and ceremonies of a school can use them to extend his or her leadership.

Implications

The message of the literature seems clear. The schools are not helpless in the face of the forces that influence a student before he or she gets to school. Schools can and do make a difference in the achievement of students. The way that they effect change is by creating an ethos or set of expectations and norms that expect and support achievement.

The one person in the school who has the most influence on the establishment of the environment that will produce achievement is the principal. Establishing that environment is no small task, nor is it reducible to a simple formula. The principal who makes a difference brings to the job more than technical expertise. He or she dedicates mind, heart, and will to the achievement of one overriding goal: the success of every student. It is this desire to see students succeed that propels the principal to set high standards, communicate those standards to teachers and students, and make sure students are rewarded for achievement and reminded of the standards if they fail. In sum, the effective principal is one who sees to it that his or her expectations for student success permeate the entire school.

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